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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,762

07/22/2005

Karin Schutze

K&W/12681US

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EXAMINER

FRITCHMAN, REBECCA M

ART UNIT

PAPER NUMBER

1777

MAIL DATE

DELIVERY MODE

03/23/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,762	Applicant(s) SCHUTZE ET AL.	
	Examiner REBECCA FRITCHMAN	Art Unit 1777	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

***Detailed Action
Summary***

1. This is the Non-Final Office action based on the 10/535762 application attorney RCE/remarks filed on 02/25/2010.
2. Claims 1-20 are pending and have been fully considered.

Claim Rejections - 35 USC § 103

3. **Claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over SCHUTZE in US 5998129 in view of NORRIS in US 5592289.**

With respect to Claims 1, 19, & 20, SCHUTZE et al. teach of a process/device for sorting and harvesting biological objects which includes a laser device for excising a biological object from the biological material by means of laser radiation(column 4, lines 38- column 5, line 35), a microscope(column 4, lines 34-36), at least one holder(Figure 5, shown below,16) containing a receptacle device having a plurality of receptacle containers(Figure 5, shown below, 18), each receptacle container provided for receiving the biological object excised from the biological material for operation with the laser microdissection system. SCHUTZE et al. do not teach of identification means for identifying the receptacle devices.

NORRIS however does teach of identifying receptacles by evaluating (evaluator) coding and of multiple receptacle containers with different well configurations (column 8, lines 7-11). NORRIS also teaches of controlling(controller) the position of the receptacle device to allow for analysis and preparation of samples(controls allocation of

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individual biological objects to be excised from the biological material to the individual receptacle containers) (column 2, paragraph 3) (abstract), and also allowing the user to control allocation(column 9, lines 25-35) . It would be obvious to combine the laser microdissection apparatus of SCHUTZE with the identification mechanism of NORRIS to provide for sample or container specific analysis and specimen specific holding due to the desire for a receptacle positioning mechanism, to accommodate analyte receptacles of various configurations and to supply this information to the computer and (Column 3, paragraph 2) due to the need for a device which can properly align receptacles(column 1, paragraphs 2 & 3, column 2, paragraph 4).

Alternatively, NORRIS teaches of identifying receptacles by evaluating the coding on multiple receptacle containers with different well configurations (column 8, lines 7-11). NORRIS also teaches of controlling the position of the receptacle device to allow for analysis and preparation of sample (controls allocation of individual biological objects to be excised from the biological material to the individual receptacle containers) s (column 2, paragraph 3) (abstract) and also allowing the user to control allocation (column 9, lines 25-35). NORRIS does not teach of they system being used for laser microdissection. SCHUTZE et al. teach of a process/device for sorting and harvesting biological objects which includes a laser device for excising a biological object from the biological material by means of laser radiation(column 4, lines 38- column 5, line 35), a microscope(column 4, lines 34-36), at least one holder(Figure 5, shown below,16) containing a receptacle device having a plurality of receptacle containers(Figure 5,

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shown below, 18), each receptacle container provided for receiving the biological object excised from the biological material for operation with the laser microdissection system.

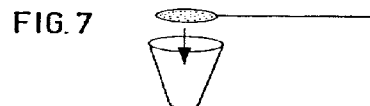
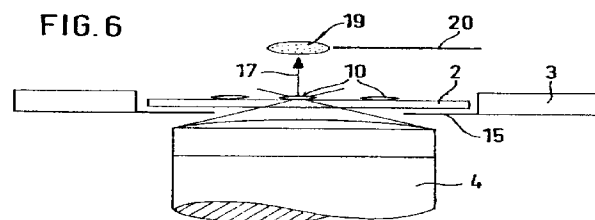
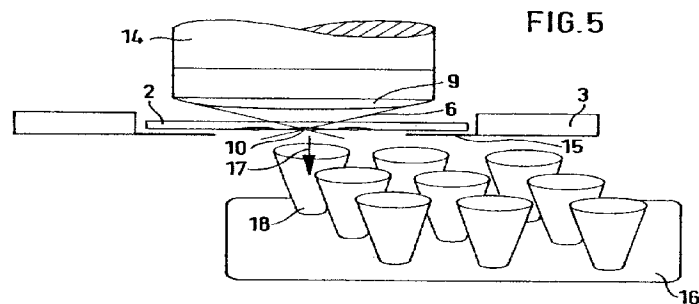
It would be obvious to combine the mechanism for aligning and identifying receptacles of NORRIS with the laser microdissection system of SCHUTZE to allow for isolation of the cells from other cells (column 1, lines 47-51).

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With respect to Claims 1, 19, & 20 GANSER et al. teach of a method for laser microdissection which allows a specimen field to be cut out from a specimen in a reliable and convenient fashion. Specifically, with respect to Claim 1, GANSER et al. teach of a laser microdissection device with a microscope for observing biological material on a specimen holder (column 2, lines 31-49), (column 1, lines 15-20). GANSER et al also teach of a holder **(receptacle container= glass slide which the biological specimen is put on, & holder = x-y- stage)** which is provided for receiving the biological object which is excised from the biological material **(the holder is capable of holding a receptacle device having a plurality of containers)** (column 2, lines 57-67 & column 3, line 1-11). GANSER et al. does not teach of identifying receptacles by evaluating coding or of multiple receptacle containers. NORRIS however does teach of identifying receptacles by evaluating coding and of multiple receptacle containers with different well configurations (column 8, lines 7-11). NORRIS also teaches of controlling the position of the receptacle device to allow for analysis and preparation of samples (column 2, paragraph 3) (abstract). It would be obvious to combine the laser microdissection apparatus of GANSER with the identification mechanism of NORRIS to provide for sample or container specific analysis and specimen specific holding due to the desire for a receptacle positioning mechanism, to accommodate analyte receptacles of various configurations and to supply this information to the computer and (Column 3, paragraph 2) due to the need for a device which can properly align receptacles (column 1, paragraphs 2 & 3, column 2, paragraph 4).

Alternatively, NORRIS teaches of identifying receptacles by evaluating the coding on multiple receptacle containers with different well configurations (column 8, lines 7-11). NORRIS also teaches of controlling the position of the receptacle device to allow for analysis and preparation of samples (column 2, paragraph 3) (abstract). NORRIS does not teach of they system being used for laser microdissection. GANSER et al., however does teach of a laser microdissection system (column 2, lines 31-49), (column 1, lines 15-20). It would be obvious to combine the mechanism for aligning and identifying receptacles of NORRIS with the laser microdissection system of GANSER to allow for more complete and accurate dissection and identification due to the current problems in the art of cutting specimens (column 1, lines 21-29).

With respect to Claim 2, NORRIS teaches of the optical scanning of the analyte receptacle (column 5, lines 7-10).

With respect to Claims 3 & 4, NORRIS teaches of the optical scanning of the analyte receptacle (column 5, lines 7-10). NORRIS discloses the claimed invention except for the use of inductive or capacitive scanning of the coding. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a capacitive or inductive code as opposed to an optical code since the examiner takes official notice of the equivalence of optical to capacitive or inductive codes for their use in identifying objects and the selections of any of these known equivalents to code and object would be obvious to one of ordinary skill in the art.

With respect to Claim 5, SCHUTZE et al. teach of monitoring the camera image (column 7, lines 5-26). SCHUTZE et al. does not teach of specifically monitoring the

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image of the receptacle device. NORRIS teaches of repeatable positioning of the analyte receptacle being important for analysis of the image (column 1, lines 25-31). From this, it would be obvious to monitor the position of the receptacle device by image analysis.

With respect to Claim 6, NORRIS et al. teach of positioning the receptacle devices (abstract).

With respect to Claim 7, NORRIS teaches of positioning the receptacle device with respect to the microscope (column 1, lines 23-30).

With respect to Claim 8, SCHUTZE et al. teach of monitoring the camera image (column 7, lines 5-26). SCHUTZE et al. does not teach of specifically monitoring the image of the receptacle device. NORRIS teaches of repeatable positioning of the analyte receptacle being important for analysis of the image (column 1, lines 25-31). From this, it would be obvious to monitor the position of the receptacle device by image analysis.

With respect to Claim 9, SCHUTZE et al. teach of acquiring an image of the specimen which is going to be dissected (column 7, lines 5-26).

With respect to Claim 10, SCHUTZE et al. teach of a laser microdissection device with a microscope for observing biological material on a specimen holder (column 7, lines 5-26). SCHUTZE et al also teach of a holder (16 & receptacle device 18) which is provided for receiving the biological object which is excised from the biological material, and of a computerized control of the position of the receptacle devices (column 7, lines 45-56) which allows for control of the dissection protocol for a

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dissection work sequence which can be carried out with respect to the receptacle device.

With respect to Claim 11, SCHUTZE et al. teach of a specimen holder (frame) for holding the receptacle device.

With respect to Claim 12, NORRIS et al., teaches of the receptacle device having and optical code (column 5, lines 7-10).

With respect to Claim 13, NORRIS et al. teach of the coding being a binary code which is defined by through openings (column 7, lines 19-22).

With respect to Claim 14, NORRIS teaches of the code being a barcode (column 9, lines 1-10).

With respect to Claims 15-17, NORRIS teaches of the optical scanning of the analyte receptacle (column 5, lines 7-10). SCHUTZE and NORRIS disclose the claimed invention except for the use of inductive or capacitative code in the form of a transponder. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a capacitative or inductive code as opposed to an optical code since the examiner takes official notice of the equivalence of optical to capacitative or inductive codes for their use in identifying objects and the selections of any of these known equivalents to code and object would be obvious to one of ordinary skill in the art.

With respect to Claim 18, NORRIS et al. teach of a holder which is designed to hold a receptacle device (microplates) (column 1, lines 31-41 & claim 18). It is obvious if a device can hold plates of varying sizes that it can also hold caps and tubes.

Response to Arguments

Applicant's arguments with respect to claims 1- 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REBECCA FRITCHMAN whose telephone number is (571)270-5542. The examiner can normally be reached on Monday- Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie, Kim can be reached on 571-272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Krishnan S Menon/

Primary Examiner, Art Unit 1777

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